

03E0
#7
ENTERED

OIPE

RAW SEQUENCE LISTING

DATE: 07/03/2002

PATENT APPLICATION: US/10/060,756A

TIME: 14:06:50

Input Set : D:\pto_PB0177.txt

Output Set: N:\CRF3\07032002\J060756A.raw

1 <110> APPLICANT: Zhang, Jian
 3 <120> TITLE OF INVENTION: HUMAN TESTIS EXPRESSED PATCHED LIKE PROTEIN
 5 <130> FILE REFERENCE: PB0177
 C--> 7 <140> CURRENT APPLICATION NUMBER: US/10/060,756A
 C--> 7 <141> CURRENT FILING DATE: 2002-01-30
 7 <150> PRIOR APPLICATION NUMBER: PCT/US01/00667
 8 <151> PRIOR FILING DATE: 2001-01-30
 10 <150> PRIOR APPLICATION NUMBER: PCT/US01/00664
 11 <151> PRIOR FILING DATE: 2001-01-30
 13 <150> PRIOR APPLICATION NUMBER: PCT/US01/00669
 14 <151> PRIOR FILING DATE: 2001-01-30
 16 <150> PRIOR APPLICATION NUMBER: PCT/US01/00665
 17 <151> PRIOR FILING DATE: 2001-01-30
 19 <150> PRIOR APPLICATION NUMBER: PCT/US01/00668
 20 <151> PRIOR FILING DATE: 2001-01-30
 22 <150> PRIOR APPLICATION NUMBER: PCT/US01/00663
 23 <151> PRIOR FILING DATE: 2001-01-30
 25 <150> PRIOR APPLICATION NUMBER: US 09/864,761
 26 <151> PRIOR FILING DATE: 2001-05-23
 28 <150> PRIOR APPLICATION NUMBER: US 60/327,898
 29 <151> PRIOR FILING DATE: 2001-10-09
 31 <160> NUMBER OF SEQ ID NOS: 4804
 33 <170> SOFTWARE: Aeomica Sequence Listing Engine
 35 <210> SEQ ID NO: 1
 36 <211> LENGTH: 3296
 37 <212> TYPE: DNA
 38 <213> ORGANISM: Homo sapiens
 40 <400> SEQUENCE: 1
 41 caggaaaccg tctggtgga tctccgcagc tgcttttcac ctgctgttcc tcttgcgctt 60
 42 cctaagagga agaataaatg ccgtgggtgg agcccaagcc caggccgggg ccggagcaga 120
 43 agcccaagct caccaaaccg gactctgcc a cgggccgca gtggtaccag gaatctcagg 180
 44 aatcggagtc ggaaggcaag cagccacccc cgggaccctt ggcacccccg aaatcccccg 240
 45 aaccctcagg acccctggcg tcggagcagg atgcaccctt gccagagggg gacgatgcac 300
 46 ccccccgcc gtcgatgctg gacgatgcac cccgcctgcc gctggagctg gacgatgcac 360
 47 ccctgccgga ggaggaaacc cccgaaccca cggccatctg caggcaccgg caccgctgtc 420
 48 acaccgactg cctagagggg ctgctgtccc gcaccttcca gtggctgggg tggcaggtgg 480
 49 gcgcgcaccc ctggatcttc ctgctggcgc ccttgatgct gacagccgcg ctgggcaccg 540
 50 gcttctctgta cctaccaag gacgaagagg aagacctaga ggagcattac acccctgtgg 600
 51 ggagcccgcc caaggcggag cggcgcttcg tgcagggcc a tttcaccacc aacgactcct 660
 52 accgcttctc cgctccagg aggagcaccg aagccaattt cgtctcgtt ctggtggtct 720
 53 cctacagcga ctactgctg gaccagcta cctttgcaga agtcagcaa ctggacggcg 780
 54 cgggtgcagg gctgcgcgtg gcgcgggaaa agggagcca gatccagtac cagcaggtgt 840
 55 gcgcgaggta cagggcgctc tgctgtcccc ccaaccgat cctgtacgcc tggcaggtga 900

RAW SEQUENCE LISTING

DATE: 07/03/2002

PATENT APPLICATION: US/10/060,756A

TIME: 14:06:50

Input Set : D:\pto_PB0177.txt

Output Set: N:\CRF3\07032002\J060756A.raw

```

56 acaaaacgct caacctgagc agcatctcct tccccgccta caaccacggc aggcattccc 960
57 tctacctgac cggcttcttc ggaggatata tcttgggggg cagcctagga atgggccagt 1020
58 tactcctgcg ggccaaagcc atgcggctgc tgtactacct gaagaccgag gaccctgagt 1080
59 acgacgtgca gagcaagcag tggctcacc atttgctcga tcaatttacc aacattaaga 1140
60 acatcttggc ctgaaaaaaa attgaggtag tccactttac atcgctttcc agacaactgg 1200
61 aatttgaggc aacttctgtg actgtgatcc ctgtgtttca cctggcatac attctcatca 1260
62 ttctgtttgc agtcacatca tgctttaggt ttgactgcat acgaaacaaa atgtgtgttg 1320
63 cggcctttgg agtgatttct gctttcttgg cagtggtagg cggctttggc ctgctgttgc 1380
64 acattggggt gccatttgtc atcatagtgt ccaattcacc atttcttatt ctagggtgtg 1440
65 gggctgatga catgtttatc atgatttctg cctggcataa gaccaacctt gcagggtgac 1500
66 tacgagagcg gatgtccaat gtctattcaa aagcggcagt gtctattaca atcaccacca 1560
67 tcaactaat cctggcctta tatacaggga ttatgagctc ttttaggtcc gtacaatgtt 1620
68 ttgcatctta tacaggaacg accctgttat ttgtctattt ttataacatc acgtgttttg 1680
69 gagcatttat ggccttlyal ggtaaaagag aagtagtctg cctatgctgg ttgaaaaagg 1740
70 ctgacccaaa atggccctca tttaaaaagt tctgtgtttt cccatttggg tctgtcccag 1800
71 atgaacatgg aactgatata catccaatga gtttgttttt tagagactat tttggcccct 1860
72 ttctcacaag gagtgagtc aagtattttg tagtctttat atatgttttg tacatcataa 1920
73 gcagtatata tgggtgtttc catgtgcagg aaggtttaga ccttcgaaat ctggcaagtg 1980
74 acgattccta catcacacca tattttaacg tagaggagaa ttatttttca gattatggtc 2040
75 ccagggttat ggttattgtt actaaaaaag ttgactactg ggataaagat gttaggcaaa 2100
76 aactggaaaa ctgtactaaa atttttgaaa aaaatgtcta tgtagataaa aatcttacag 2160
77 agttttggtt agatgcata gtgcaatatt taaaaggtaa cagccaagat cctaatagaga 2220
78 agaatacttt tatgaacaat attcctgatt ttttaagcaa ttttccaaat tttcagcatg 2280
79 atattaatat ttcttcatca aatgaaatca tttcttccc gggcttcatt cagacaacag 2340
80 atgtttcttc ctcagccaaa aagaaaatat tgttattcca attacgacgc atagctgaag 2400
81 actgtcaaat tcccctaata gtgtataacc aggcatttat atattttgat cagtatgctg 2460
82 caatattaga agacactgtt agaaatgtat tgggtgcata gcagctatg ttcattgttt 2520
83 ccttattgtt aatcccttat ccattgtgtt ccttgtgggt gacttttget atcggttctg 2580
84 tgattgtagg ggtaacgggt ttcattggcat tctggaaagt caatcttgat tccatatcca 2640
85 tgattaatct tgcattttgt acagggtttt cttctgattt ttctgcacac atttcctatg 2700
86 catttgtttc tagttctcaa ccctcagtaa accaaaaatc agttgaggca ttgtatcttc 2760
87 taggctaccc agtggttaca agtgcaattt caacaataat aggggtgtgt gttttagctg 2820
88 cagcgaaagc atacatcttc agaacatttt ttaagattat gtttcttgtt atgatatttg 2880
89 gggcagctca tggcctaatt tttattccag tattcttaac cttttttgga aggtttattt 2940
90 gaatatccac taacaagtca aagaccaatt ctagaattcc tgattgcctt attccaatct 3000
91 gattttttta aatgcactat taagaatagt caacaaacta ctgggaggcc aaagtgggtg 3060
92 gatcacctga ggtcaagaat tcgagaccag cctggccaac atggtgaaac ctcgacacta 3120
93 ctgaaaatac aaaaattatc caggcatggt ggctgcacc tataatccca gctacctggg 3180
94 aggetgaggc aggagaatcg cttgaacctg ggagatggag gttgcagtga gctggagtgc 3240
95 accaggcact ccagcctggg tgacaagaat gagactccgt ctcagaaaaa aaaaaa 3296
97 <210> SEQ ID NO: 2
98 <211> LENGTH: 2865
99 <212> TYPE: DNA
100 <213> ORGANISM: Homo sapiens
102 <400> SEQUENCE: 2
103 atgccgtggg tggagcccaa gccaggccg gggccggagc agaagcccaa gctcaccaa 60
104 ccggactctg ccaccgggcc gcagtgttac caggaatctc aggaatcgga gtcggaaggc 120
105 aagcagccac ccccgggacc cctggcacc ccgaaatccc ccgaaccctc aggaccctg 180
106 gcgtcgagc aggatgcacc cctgccagag ggggacgatg ccccccccg gccgtcgatg 240

```

RAW SEQUENCE LISTING

DATE: 07/03/2002

PATENT APPLICATION: US/10/060,756A

TIME: 14:06:50

Input Set : D:\pto_PB0177.txt

Output Set: N:\CRF3\07032002\J060756A.raw

```

107 ctggacgatg caccgcgcct gccgctggag ctggacgatg caccgcgcct ggaggaggaa 300
108 acccccgaac ccacggccat ctgcaggcac cggcaccgct gtcacaccga ctgcctagag 360
109 gggctgctgt cccgcacctt ccagtggttg ggggtggcagg tgggcgcgca cccctggatc 420
110 ttcctgctgg cgcccttgat gctgacagcc gcgctgggca ccggcttcct gtacctacc 480
111 aaggacgaag aggaagacct agaggagcat tacaccctg tggggagccc ggccaaggcg 540
112 gaggcgcgct tcgtgcaggg ccatttcacc accaaccgact cctaccgctt ctccgcctcc 600
113 aggaggagca ccgaagccaa tttcgtctcg cttctggttg tctcctacag cgactcactg 660
114 ctggaccag ctacctttgc agaagtcagc aaactggagc gcgcggtgca ggatctgcgc 720
115 gtggcgcggg aaaagggaag ccagatccag taccagcagg tgtgcgcgag gtacaggcg 780
116 ctctgcgtgc cccccaacc gatcctgtac gcctggcagg tgaacaaaac gctcaacctg 840
117 agcagcatct ccttccccgc ctacaaccac ggcaggcatc cctctacct gaccggcttc 900
118 ttcggaggat acatcttggg gggcagccta ggaatgggac agttactcct gcgggccaaa 960
119 gccatgcggc tgctgtacta cctgaagacc gaggaccctg agtacgacgt gcagagcaag 1020
120 cagtggctca cccatttget cgatcaattt accaaccatta agaacatctt ggcttgaaa 1080
121 aaaattgagg tagtccactt tacatcgctt tccagacaac tgggaatttg ggcaacttct 1140
122 gtgactgtga tccctgtgtt tcacctggca tacattctca tcattctgtt tgcagtcaca 1200
123 tcatgcttta ggtttgactg catacgaaac aaaatgtgtg ttgcggcctt tggagtgtt 1260
124 tctgctttct tggcagtggt gaggcgctt ggcctgctgt tgcacattgg ggtgccattt 1320
125 gtcatcatag ttgccaattc accatttctt attctagggt ttggggtcga tgacatgtt 1380
126 atcatgattt ctgcctggca taagaccaac cttgcagggt acatacgaga gcggatgtcc 1440
127 aatgtctatt caaaagcggc agtgtctatt acaatcacca ccatcactaa catcctggcc 1500
128 ttatatacag ggattatgag ctcttttagg tccgtacaat gtttttgcac ctatacagga 1560
129 acgacctgt tattttgcta tttttataac atcacgtgtt ttggagcatt tatggccttg 1620
130 gatggtaaaa gagaagtagt ctgcctatgc tgggtgaaaa aggctgacct aaaatggccc 1680
131 tcatttaaaa agttctgctg tttccattt ggttctgtcc cagatgaaca tggaaactgat 1740
132 atccatccaa tgagttgtt ttttagagac tattttggcc ctttctcac aaggagtgtg 1800
133 tccaagtatt ttgtagtctt tatatatgtt ttgtacatca taagcagtat atatgggtgt 1860
134 ttccatgtgc aggaagggtt agacctcga aatctggcaa gtgacgattc ctacatcaca 1920
135 ccatatttta acgtagagga gaattatttt tcagattatg gtcccagggt tatggttatt 1980
136 gttactaaaa aagttgacta ctgggataaa gatgttaggc aaaaactgga aaactgtact 2040
137 aaaatttttg aaaaaaatgt ctatgtagat aaaaatctta cagagttttg gttagatgca 2100
138 tatgtgcaat atttaaaagg taacagccaa gatcctaag agaagaatac ttttatgaac 2160
139 aatattcctg attttttaag caattttcca aattttcagc atgatattaa tatttcttca 2220
140 tcaaatgaaa tcatttcttc ccggggcttc attcagacaa cagatgtttc ttcctcagcc 2280
141 aaaaagaaaa tattgttatt ccaattacga cgcatactg aagactgtca aattccccta 2340
142 atggtgtata accaggcatt tatatatatt gatcagtatg ctgcaatatt agaagacact 2400
143 gttagaaatg tattggttgc atcagcagct atgttcattg tttccttatt gttaatccct 2460
144 tatccattgt gttccttgtg ggtgactttt gctatcggtt ctgtgattgt aggggtaacg 2520
145 ggtttcatgg cattctggaa agtcaatctt gattccatat ccatgattaa tcttgtcatt 2580
146 tgtacagggt tttctttcga tttttctgca cacatttctt atgcatttgt ttctagtctt 2640
147 caacctcag taaacccaaa atcagttgag gcattgtatc ttctaggcta cccagtgtta 2700
148 caaagtgcaa tttcaacaat aataggggtg tgtgttttag ctgcagcgaa agcatacatc 2760
149 ttcagaacat tttttaagat tatgtttctt gttatgatat ttggggcagc tcatggccta 2820
150 atttttattc cagtattctt aacctttttt ggaaggttta tttga 2865
152 <210> SEQ ID NO: 3
153 <211> LENGTH: 954
154 <212> TYPE: PRT
155 <213> ORGANISM: Homo sapiens
157 <400> SEQUENCE: 3

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/060,756A

DATE: 07/03/2002

TIME: 14:06:50

Input Set : D:\pto_PB0177.txt

Output Set: N:\CRF3\07032002\J060756A.raw

```

158 Met Pro Trp Val Glu Pro Lys Pro Arg Pro Gly Pro Glu Gln Lys Pro
159 1 5 10 15
161 Lys Leu Thr Lys Pro Asp Ser Ala Thr Gly Pro Gln Trp Tyr Gln Glu
162 20 25 30
164 Ser Gln Glu Ser Glu Ser Glu Gly Lys Gln Pro Pro Pro Gly Pro Leu
165 35 40 45
167 Ala Pro Pro Lys Ser Pro Glu Pro Ser Gly Pro Leu Ala Ser Glu Gln
168 50 55 60
170 Asp Ala Pro Leu Pro Glu Gly Asp Asp Ala Pro Pro Arg Pro Ser Met
171 65 70 75 80
173 Leu Asp Asp Ala Pro Arg Leu Pro Leu Glu Leu Asp Asp Ala Pro Leu
174 85 90 95
176 Pro Glu Glu Glu Thr Pro Glu Pro Thr Ala Ile Cys Arg His Arg His
177 100 105 110
179 Arg Cys His Thr Asp Cys Leu Glu Gly Leu Leu Ser Arg Thr Phe Gln
180 115 120 125
182 Trp Leu Gly Trp Gln Val Gly Ala His Pro Trp Ile Phe Leu Leu Ala
183 130 135 140
185 Pro Leu Met Leu Thr Ala Leu Gly Thr Gly Phe Leu Tyr Leu Pro
186 145 150 155 160
188 Lys Asp Glu Glu Glu Asp Leu Glu Glu His Tyr Thr Pro Val Gly Ser
189 165 170 175
191 Pro Ala Lys Ala Glu Arg Arg Phe Val Gln Gly His Phe Thr Thr Asn
192 180 185 190
194 Asp Ser Tyr Arg Phe Ser Ala Ser Arg Arg Ser Thr Glu Ala Asn Phe
195 195 200 205
197 Val Ser Leu Leu Val Val Ser Tyr Ser Asp Ser Leu Leu Asp Pro Ala
198 210 215 220
200 Thr Phe Ala Glu Val Ser Lys Leu Asp Gly Ala Val Gln Asp Leu Arg
201 225 230 235 240
203 Val Ala Arg Glu Lys Gly Ser Gln Ile Gln Tyr Gln Gln Val Cys Ala
204 245 250 255
206 Arg Tyr Arg Ala Leu Cys Val Pro Pro Asn Pro Ile Leu Tyr Ala Trp
207 260 265 270
209 Gln Val Asn Lys Thr Leu Asn Leu Ser Ser Ile Ser Phe Pro Ala Tyr
210 275 280 285
212 Asn His Gly Arg His Pro Leu Tyr Leu Thr Gly Phe Phe Gly Gly Tyr
213 290 295 300
215 Ile Leu Gly Gly Ser Leu Gly Met Gly Gln Leu Leu Leu Arg Ala Lys
216 305 310 315 320
218 Ala Met Arg Leu Leu Tyr Tyr Leu Lys Thr Glu Asp Pro Glu Tyr Asp
219 325 330 335
221 Val Gln Ser Lys Gln Trp Leu Thr His Leu Leu Asp Gln Phe Thr Asn
222 340 345 350
224 Ile Lys Asn Ile Leu Ala Leu Lys Lys Ile Glu Val Val His Phe Thr
225 355 360 365
227 Ser Leu Ser Arg Gln Leu Glu Phe Glu Ala Thr Ser Val Thr Val Ile
228 370 375 380
230 Pro Val Phe His Leu Ala Tyr Ile Leu Ile Ile Leu Phe Ala Val Thr

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/060,756A

DATE: 07/03/2002

TIME: 14:06:50

Input Set : D:\pto_PB0177.txt

Output Set: N:\CRF3\07032002\J060756A.raw

```

231 385          390          395          400
233 Ser Cys Phe Arg Phe Asp Cys Ile Arg Asn Lys Met Cys Val Ala Ala
234          405          410          415
236 Phe Gly Val Ile Ser Ala Phe Leu Ala Val Val Ser Gly Phe Gly Leu
237          420          425          430
239 Leu Leu His Ile Gly Val Pro Phe Val Ile Ile Val Ala Asn Ser Pro
240          435          440          445
242 Phe Leu Ile Leu Gly Val Gly Val Asp Asp Met Phe Ile Met Ile Ser
243          450          455          460
245 Ala Trp His Lys Thr Asn Leu Ala Gly Asp Ile Arg Glu Arg Met Ser
246 465          470          475          480
248 Asn Val Tyr Ser Lys Ala Ala Val Ser Ile Thr Ile Thr Thr Ile Thr
249          485          490          495
251 Asn Ile Leu Ala Leu Tyr Thr Gly Ile Met Ser Ser Phe Arg Ser Val
252          500          505          510
254 Gln Cys Phe Cys Ile Tyr Thr Gly Thr Thr Leu Leu Phe Cys Tyr Phe
255          515          520          525
257 Tyr Asn Ile Thr Cys Phe Gly Ala Phe Met Ala Leu Asp Gly Lys Arg
258          530          535          540
260 Glu Val Val Cys Leu Cys Trp Leu Lys Lys Ala Asp Pro Lys Trp Pro
261 545          550          555          560
263 Ser Phe Lys Lys Phe Cys Cys Phe Pro Phe Gly Ser Val Pro Asp Glu
264          565          570          575
266 His Gly Thr Asp Ile His Pro Met Ser Leu Phe Phe Arg Asp Tyr Phe
267          580          585          590
269 Gly Pro Phe Leu Thr Arg Ser Glu Ser Lys Tyr Phe Val Val Phe Ile
270          595          600          605
272 Tyr Val Leu Tyr Ile Ile Ser Ser Ile Tyr Gly Cys Phe His Val Gln
273          610          615          620
275 Glu Gly Leu Asp Leu Arg Asn Leu Ala Ser Asp Asp Ser Tyr Ile Thr
276 625          630          635          640
278 Pro Tyr Phe Asn Val Glu Glu Asn Tyr Phe Ser Asp Tyr Gly Pro Arg
279          645          650          655
281 Val Met Val Ile Val Thr Lys Lys Val Asp Tyr Trp Asp Lys Asp Val
282          660          665          670
284 Arg Gln Lys Leu Glu Asn Cys Thr Lys Ile Phe Glu Lys Asn Val Tyr
285          675          680          685
287 Val Asp Lys Asn Leu Thr Glu Phe Trp Leu Asp Ala Tyr Val Gln Tyr
288          690          695          700
290 Leu Lys Gly Asn Ser Gln Asp Pro Asn Glu Lys Asn Thr Phe Met Asn
291 705          710          715          720
293 Asn Ile Pro Asp Phe Leu Ser Asn Phe Pro Asn Phe Gln His Asp Ile
294          725          730          735
296 Asn Ile Ser Ser Ser Asn Glu Ile Ile Ser Ser Arg Gly Phe Ile Gln
297          740          745          750
299 Thr Thr Asp Val Ser Ser Ser Ala Lys Lys Lys Ile Leu Phe Gln
300          755          760          765
302 Leu Arg Arg Ile Ala Glu Asp Cys Gln Ile Pro Leu Met Val Tyr Asn
303          770          775          780

```

VERIFICATION SUMMARY

DATE: 07/03/2002

PATENT APPLICATION: US/10/060,756A

TIME: 14:06:51

Input Set : D:\pto_PB0177.txt

Output Set: N:\CRF3\07032002\J060756A.raw

L:7 M:270 C: Current Application Number differs, Replaced Current Application No

L:7 M:271 C: Current Filing Date differs, Replaced Current Filing Date